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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,784	08/15/2001	William M. Gillon	50588/360	2550

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EXAMINER	
KHOSHNOODI, NADIA	
ART UNIT	**PAPER NUMBER**
2137	

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,784	GILLON ET AL.	
	Examiner	Art Unit	
	Nadia Khoshnoodi	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 11-20* is/are pending in the application.

4a) Of the above claim(s) *6-10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/15/2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/12-12-2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claims 6-10 are cancelled. Applicant's arguments/ amendments with respect to amended claims 1, 11-12, & 18-20 and previously presented claims 2-5 & 13-17 filed 12/12/2005 have been fully considered but they are not persuasive. The Examiner would like to point out that this action is made final (See MPEP 706.07a).

The terminal disclaimer filed on 12/12/2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 09/871,415 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Previous objections with regards to the drawings are withdrawn based on the Applicants' amendments to the specification as filed on 12/12/2005. Furthermore, previous claim objections and 35 USC 112, second paragraph rejections with regards to the claims have also been withdrawn in light of the amendments filed 12/12/2005.

Response to Arguments

Applicants contend that in the primary reference, Akiyama et al., "there is no discussion of encrypting channel keys to produce a group of encrypted channel keys." Examiner respectfully disagrees. Akiyama et al. teach that each channel has a corresponding channel key (col. 7, lines 49-53) where those channel keys are then encrypted using a Key.sub.H (which is necessary for decryption thus must have been used to encrypt as well) resulting in a group of encrypted channel keys (col. 27, lines 4-8 and lines 25-51).

Applicants further contend that Akiyama et al. have "no teaching of encrypting a group of channel keys using two types of encryption." Examiner respectfully disagrees. Akiyama et al. teach that there is a four-step encryption method which includes two types of encryption based on the different inputs to the encryption algorithm, hence using two types of encryption (col. 27, lines 4-8 and lines 25-51). The Examiner would like to point out that "two types of encryption" is broad and therefore the Examiner has used the broadest reasonable interpretation according to MPEP 2111.

Finally Applicants contend that Ludtke fails to teach or suggest "concurrently transmitting two different groups of channel keys." Examiner respectfully disagrees. Ludtke discloses OOB data which is used to decrypt data content that is transmitted with a specific form/frequency (col. 3, lines 42-47). Furthermore, Ludtke suggests that it is useful to concurrently transfer data of different frequencies "in order to overcome a critical deficiency in the prior art STBs, namely the inability to handle [the] two signals" (col. 7, lines 11-17). Thus, when combining with Ludtke's motivation of transmitting two signals concurrently with different frequencies and Akiyama et al. who provide for the different groups of encryption keys, the limitation of concurrently transmitting two different groups of channel keys is met.

Due to the reasons stated above, the Examiner maintains rejections with respect to amended claims 1, 11-12, & 18-20 and previously presented claims 2-5 & 13-17. Akiyama et al. teach the limitations that the Applicant suggests distinguish from the prior art. Furthermore, Ludtke in combination with Akiyama et al. teach the limitations not explicitly disclosed by Akiyama et al. Therefore, it is the Examiner's conclusion that amended claims 1, 11-12, & 18-

20 and previously presented claims 2-5 & 13-17 are not patentably distinct or non-obvious over the prior art of record as presented.

Claim Rejections - 35 USC § 103

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

II. Claims 1-5 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al., U.S. Patent No. 6,463,155 and further in view of Ludtke, U.S. Patent No. 6,154,206.

As per claim 1:

Akiyama et al. substantially teach a computer-implemented method comprising: encrypting a group of multimedia channel keys using a first type of encryption to produce a first group of encrypted multimedia channel keys (col. 8, lines 49-53); encrypting said group of multimedia channel keys using a second type of encryption to produce a second group of encrypted multimedia channel keys (col. 27, lines 4-57). Not explicitly disclosed is concurrently transmitting said first group of encrypted multimedia channel keys with said second group of multimedia channel keys to a plurality of multimedia subscribers having multimedia receivers capable of decrypting either said first group of encrypted multimedia channel keys and/or said

second group of multimedia channel keys.

However, Ludtke teaches concurrently sending the OOB data which acts as a key for descrambling the multimedia channels. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Akiyama et al. to encrypt the OOB data with a master key to create and securely transmit two different groups of keys used to decrypt various multimedia channels that a plurality of receivers have access to depending on entitlement information. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Ludtke in col. 3, lines 36-54 and col. 7, lines 11-17.

As per claim 2:

Akiyama et al. and Ludtke substantially teach the method as in claim 1. Furthermore, Ludtke teaches the method wherein said second type of encryption is digital video broadcasting ("DVB") encryption (col. 6, lines 64-66).

As per claim 3:

Akiyama et al. and Ludtke substantially teach the method as in claim 1. Furthermore, Akiyama et al. teach the method further comprising: transmitting entitlement information with said group of multimedia channel keys encrypted using said second type of encryption, said entitlement information indicating which of said multimedia channels a user has the right to decrypt (col. 16, line 20 – col. 17, line 20).

As per claim 4:

Akiyama et al. and Ludtke substantially teach the method as in claim 3. Furthermore, Akiyama et al. teach the method further comprising: decrypting said second group of encrypted

multimedia channel keys at a multimedia receiver (col. 16, lines 47-57).

As per claim 5:

Akiyama et al. and Ludtke substantially teach the method as in claim 4. Furthermore, Akiyama et al. teach the method further comprising: searching said entitlement information to determine whether said user has the right to view a particular channel selected by said user; and decrypting said channel using one of said decrypted keys if said user has said right (col. 16, line 43 – col. 17, line 20).

As per claim 11:

Akiyama et al. substantially teach a system for processing multimedia channels comprising: transmitting decryption keys for decrypting said multimedia channels, said keys encrypted in both a first encryption format and a second encryption format (col. 27, lines 1-51). Not explicitly disclosed is said keys encrypted in said first encryption format being decryptable by a first type of multimedia receiver; and said keys encrypted in said second encryption format being decryptable by a second type of multimedia receiver.

However, Ludtke teaches different control units with different authorization rights for various multimedia channels, where there are different encryption formats used for different multimedia channels. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the system disclosed in Akiyama et al. for a first type of multimedia receiver to decrypt a first encryption format and a second type of multimedia receiver to decrypt a second encryption format. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Ludtke in col. 1, lines 42-58 and col. 6, lines 46-

49.

As per claim 12:

Akiyama et al. and Ludtke substantially teach the system as in claim 11. Furthermore, Akiyama et al. teach wherein said second encryption format permits all of said keys to be decrypted in real-time as they are received by said multimedia receiver (col. 27, lines 43-51).

As per claim 13:

Akiyama et al. and Ludtke substantially teach the method as in claim 12. Furthermore, Ludtke teaches the method wherein said second type of encryption is digital video broadcasting ("DVB") encryption (col. 6, lines 64-66).

As per claim 14:

Akiyama et al. and Ludtke substantially teach the system as in claim 11. Furthermore, Akiyama et al. teach the system further comprising: transmitting entitlement information indicating which of said multimedia channels a user has a right to view (col. 19, lines 11-28).

As per claim 15:

Akiyama et al. and Ludtke substantially teach the system as in claim 14. Furthermore, Akiyama et al. teach the system further comprising: said second type of multimedia receiver decrypting only those keys identified by said entitlement information (col. 28, lines 40-52).

As per claim 16:

Akiyama et al. and Ludtke substantially teach the system as in claim 14. Furthermore, Akiyama et al. teach the system further comprising: said second type of multimedia receiver decrypting said decryption keys and using said decryption keys to decrypt multimedia channels identified by said entitlement information (col. 24, lines 1-7).

As per claim 17:

Akiyama et al. and Ludtke substantially teach the system as in claim 11. Furthermore, Akiyama et al. teach the system further comprising: said second type of multimedia receiver decrypting one or more of said keys and using said one or more keys to decrypt one or more multimedia channels (col. 24, lines 1-7).

Not explicitly disclosed is said second type of multimedia receiver re-encrypting said multimedia channels using an alternative encryption technique. However, Ludtke et al. teach re-encrypting the multimedia channels using a copy protection scheme. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Akiyama et al. to re-encrypt the multimedia channels using an alternative encryption technique in order to copy protect the signal. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Ludtke in col. 10, lines 24-27.

As per claim 18:

Akiyama et al. and Ludtke substantially teach the method as in claim 17. Furthermore, Ludtke teaches the method wherein said second type of encryption is digital video broadcasting ("DVB") encryption (col. 6, lines 64-66).

As per claim 19:

Akiyama et al. and Ludtke et al. substantially teach the method as in claim 17. Furthermore, Akiyama et al. teach the system further comprising: storing said multimedia channels in said alternative encryption format on a mass storage device (col. 16, lines 47-50).

As per claim 20:

Akiyama et al. and Ludtke substantially teach the method as in claim 19. Furthermore, Ludtke teaches the method further comprising: decrypting and playing back one or more of said multimedia channels from said mass storage device responsive to a user request to play back said one or more of said multimedia channels (col. 5, line 61 – col. 6, line 12).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadia Khoshnoodi whose telephone number is (571) 272-3825. The examiner can normally be reached on M-F: 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Nadia Khoshnoodi
Examiner
Art Unit 2137
3/7/2006

NK

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER